

IN THE CLAIMS:

Kindly amend pending claims 130-249 as follows:

130. (Currently Amended) A personal computer, ~~configured to operating as a wireless personal communications device in a network including computers, said personal computer being configured to function in a shared operation including at least said personal computer and a second computer connected to said network, said personal computer~~ comprising:

a microchip, [said] the microchip ~~including a~~ comprising:

at least two microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a~~ non-volatile memory component,

~~said microchip including a~~ DSP, and

~~said microchip including a component which provides a power management component function of said personal computer; and~~

a wireless network connection mechanism configured to connect [said] the personal computer to [said] a network, [said] the network ~~including comprising,~~
an Internet.

131. (Currently Amended) The personal computer of claim 130, wherein [said] the wireless network connection mechanism is substantially located on [said] the microchip.

132. (Currently Amended) The personal computer of claim 130, wherein [said] the network ~~includes~~ comprises a World Wide Web.

133. (Currently Amended) The personal computer of claim 130, wherein ~~substantially all of said~~ the personal computer is located on said ~~comprises only one~~ microchip.

134. (Currently Amended) The personal computer of claim 136, wherein [said] the second personal computer is idled by a personal user.

135. (Currently Amended) The personal computer of claim 130, wherein ~~said shared operation includes the provision and use of shared services by at least said personal computer and said second computer,~~

~~wherein a respective portion of said shared operation is allocated between at least said personal computer and said second computer by an allocation mechanism~~ the microchip comprises at least four microprocessors, exclusive of the digital signal processor (DSP).

136. (Currently Amended) The personal computer of claim 135, wherein the personal computer is configured to function in a shared operation comprising at least the personal computer and a second computer connected to the network; and [said] the shared services operation involves compensation.

137. (Currently Amended) The personal computer of claim 136, wherein [said] the compensation is financial.

138. (Currently Amended) The personal computer of claim [135] 136, wherein [said] the shared services include operation comprises shared file resources.

139. (Currently Amended) The personal computer of claim [135] 136, wherein [said] ~~the shared services includes~~ operation comprises parallel processing.

140. (Currently Amended) The personal computer of claim [135] 136, wherein [said] ~~the shared services includes~~ operation comprises multi-tasking.

141. (Currently Amended) The personal computer of claim [135] 130, wherein ~~said shared services include distributed processing~~ the microchip comprises a digital signal processor (DSP).

142. (Currently Amended) The personal computer of claim 130, wherein a random access memory (RAM) located on [said] the microchip comprises a non-cache memory.

143. (Currently Amended) The personal computer of claim 130, wherein ~~said network includes an Internet Service Provider~~ the microchip comprises at least 8 microprocessors, exclusive of the digital signal processor (DSP).

144. (Currently Amended) The personal computer of claim 130, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is dense wave division multiplexed (DWDM).

145. (Currently Amended) The personal computer of claim 130, wherein [said] the network ~~includes~~ comprises a network server computer.

146. (Currently Amended) The personal computer of claim 130, wherein [said] the network ~~includes~~ comprises an Intranet.

147. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises a firewall.

148. (Currently Amended) The personal computer of claim 147, wherein ~~said~~ ~~microchip includes a~~ the firewall is configured to protect a single microprocessor.

149. (Currently Amended) The personal computer of claim 148, wherein ~~said~~ ~~microprocessor~~ firewall denies all access to [said] the microprocessor by [said] the network.

150. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer is intended for personal use by at least one of an individual owner and a leaser of [said] the personal computer.

151. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes~~ comprises a connection from [said] the personal computer to [said] the network, [said] the connection having a speed of data transmission that is greater than a peak data processing speed of [said] the personal computer.

152. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer is controlled by a user of [said] the personal computer through a wireless controller operated by [said] the user.

153. (Currently Amended) The personal computer of claim 130, wherein ~~said network includes a network server computer~~ the microchip comprises at least 16 microprocessors, exclusive of the digital signal processor (DSP).

154. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~substantially~~ provides a graphics function ~~of said personal computer.~~

155. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises a modem component ~~of said personal computer.~~

156. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~substantially~~ provides a sound function ~~of said personal computer.~~

157. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes a component which substantially provides~~ comprises a video function ~~of said personal computer.~~

158. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises a magnetic memory component ~~of said personal computer.~~

159. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises a BIOS (basic input/output system) component ~~of said personal computer.~~

160. (Currently Amended) The personal computer of claim 159, wherein [said] the BIOS component is located on a flash memory component ~~of said personal computer~~.

161. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip includes comprises at least part of a system bus ~~component of said personal computer~~.

162. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip includes comprises a transponder.

163. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer includes comprises: one of a handheld personal digital assistant, a wearable computer, ~~an entertainment device, a television, a digital set-top control box, a video game, a videocam, an optical data recording device, a compact disc (CD) or a digital video disk (DVD) player/recorder,~~ a radio, a camera, a household electronic device, [and] or a business electronic device, or any combination thereof.

164. (Currently Amended) The personal computer of claim 163, wherein ~~said entertainment device includes one of a television and a digital set-top control box~~ the microchip comprises at least 32 microprocessors, exclusive of the digital signal processor (DSP).

165. (Currently Amended) The personal computer of claim 163, wherein ~~said optical data recording device includes one of a compact disc (CD) and a digital video disk (DVD)~~

~~player/recorder~~ the microchip comprises at least 64 microprocessors, exclusive of the digital signal processor (DSP).

166. (Currently Amended) The personal computer of claim 130, wherein ~~said personal computer~~ the microchip comprises ~~includes one of a digital computer, an analog computer, and a neural computer.~~

167. (Currently Amended) The personal computer of claim 130, wherein a system bus of ~~said personal computer~~ the microchip comprises ~~includes~~ a hierarchical connection architecture between at least some of [said] the microprocessors.

168. (Currently Amended) The personal computer of claim 167, wherein [said] the system bus ~~includes~~ comprises a binary tree network architecture between at least some of [said] the microprocessors.

169. (Currently Amended) The personal computer of claim 167, wherein ~~said network includes a hierarchical connection architecture between at least some of a plurality of personal computers in said network~~ the microchip comprises at least 128 microprocessors, exclusive of the digital signal processor (DSP).

170. (Currently Amended) The personal computer of claim 169, wherein ~~said network defaults to a binary tree network architecture~~ the microchip comprises at least 256 microprocessors, exclusive of the digital signal processor (DSP).

171. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes~~ comprises a direct optical fiber connection to [said] the microchip.

172. (Currently Amended) The personal computer of claim [130] 170, wherein at least some of [said] the microprocessors have a non-superscalar architecture.

173. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip is connected to a hard disk drive controlled by [said] the microchip.

174. (Currently Amended) The personal computer of claim 130, wherein [said] microchip ~~includes~~ comprises an electromechanical component.

175. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises active configuration of an integrated circuit of [said] the microchip.

176. (Currently Amended) The personal computer of claim 175, wherein [said] the microchip ~~includes~~ comprises a field-programmable gate array.

177. (Currently Amended) The personal computer of claim 130, wherein ~~said network includes a network architecture to connect a plurality of personal computers, said network architecture being dynamically configured by said personal computers based at least in part on one of a processing requirement of a shared operation performed in said network~~

~~and a data requirement associated with said shared operation~~ the microchip comprises at least 512 microprocessors, exclusive of a digital signal processor (DSP).

178. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip includes comprises a component which substantially provides an encryption function of [said] the personal computer.

179. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes~~ comprises an encryption microchip.

180. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes~~ comprises a telephone.

181. (Currently Amended) The personal computer of claim 180, wherein [said] the second computer is a personal computer.

182. (Currently Amended) The personal computer of claim 130, wherein [said] the non-volatile memory component ~~includes~~ comprises a flash memory component.

183. (Currently Amended) The personal computer of claim 182, wherein [said] the personal computer is substantially contained on [said] the microchip, [said] the microchip comprising a system on a chip.

184. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes more than one~~ comprises at least 1024 [said] microprocessors, exclusive of a said digital signal processor (DSP).

185. (Currently Amended) The personal computer of claim 184, wherein at least two of [said] the microprocessors are used for parallel processing or multi-tasking.

186. (Currently Amended) The personal computer of claim 130, wherein [said] the personal communications device ~~includes~~ comprises a pager.

187. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer is mobile.

188. (Currently Amended) The personal computer of claim 130, wherein ~~an operating system of said personal computer is Linux~~ the microchip comprises a television function.

189. (Currently Amended) The personal computer of claim [130] 136, wherein [said] the wireless network connection mechanism is configured to make a direct wireless connection to [said] the second personal computer, [said] the direct wireless connection being made without a network server or router.

190. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer is configured for a substantially continuous wireless network connection.

191. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes~~ comprises an optical fiber network connection mechanism configured to connect [said] the personal computer to [said] the network and to process a fiber optic signal that is wave division multiplexed.

192. (Currently Amended) The personal computer of claim [130] 191, wherein [said] the optical fiber network connection mechanism is configured to process a fiber optic signal that is wave division multiplexed.

193. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes~~ comprises a network computer firewall.

194. (Currently Amended) The personal computer of claim 130, wherein [said] the personal computer ~~includes one of~~ comprises an automobile, a transportation device, [and] or a robot, or any combination thereof.

195. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises an application-specific integrated circuit (ASIC).

196. (Currently Amended) The personal computer of claim 130, wherein [said] the microchip ~~includes~~ comprises a firewall configured to [protect] deny all network access to at least a portion of [said] the non-volatile memory component.

197. (Currently Amended) The personal computer of claim 130, wherein ~~said personal computer and said second computer both have a substantially homogeneous PC architecture~~ said the microchip comprises at least two or four digital signal processors (DSPs).

198. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip including a comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a non-volatile memory component,~~

a power management component; and

~~said microchip including~~ a wireless network connection mechanism

configured to connect [said] the personal computer to [said] a network,

[said] the network including comprising an Internet, ~~and~~

~~said microchip including a component which provides a power management function of said personal computer.~~

199. (Currently Amended) The personal computer of claim 198, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

200. (Currently Amended) The personal computer of claim 198, wherein ~~said wireless network connection mechanism is~~ a non-volatile memory component and a firewall hardware component are substantially located on [said] the microchip.

201. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip including a plurality of comprising:

at least four two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024
microprocessors, exclusive of a digital signal processor (DSP),
~~said microchip including a non-volatile memory component,~~
~~said microchip including~~ an analog communications component, and
~~said microchip including a component which provides a power management~~
~~component function of said personal computer;~~ and
a wireless network connection mechanism configured to connect [said] the personal
computer to [said] the network, [said] the network ~~including~~ comprising:
an Internet.

202. (Currently Amended) The personal computer of claim 201, wherein ~~said~~
~~personal computer includes a telephone~~ the microchip comprises an encryption component.

203. (Currently Amended) The personal computer of claim 201, wherein [said] the
wireless network connection mechanism, a non-volatile memory component and a firewall
hardware component are [is] substantially located on [said] the microchip.

204. (Currently Amended) A personal computer ~~configured to include operating as a~~
~~mobile wireless personal communications device in a network including computers, the~~
~~personal computer~~ comprising:

a microchip, [said] the microchip ~~including a~~ comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024
microprocessors, exclusive of a digital signal processor (DSP);
~~said microchip including a flash memory component,~~
a digital signal processor (DSP); and

~~said microchip including a component which provides a power management component-function of said personal computer; and~~
a wireless network connection mechanism configured to connect [said] the personal computer to [said] a network, [said] the network ~~including comprising:~~
an Internet.

205. (Currently Amended) The personal computer of claim 204, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

206. (Currently Amended) The personal computer of claim 204, wherein [said] the wireless network connection mechanism, a flash memory component and a firewall hardware component are [is] substantially located on [said] the microchip.

207. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip ~~including a~~ comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a non-volatile memory component,~~

~~said microchip including an~~ active configuration of an integrated circuit of

[said] the microchip, and

~~said microchip including a component which provides a power management component-function of said personal computer; and~~

a wireless network connection mechanism configured to connect [said] the personal computer to [said] a network, [said] the network ~~including~~ comprising:
an Internet.

208. (Currently Amended) The personal computer of claim 207, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

209. (Currently Amended) The personal computer of claim 207, wherein [said] the wireless network connection mechanism, a flash memory component and a firewall hardware component are [is] substantially located on [said] the microchip.

210. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip ~~including a~~ comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a non-volatile memory component,~~

~~said microchip including~~ a field-programmable gate array (FPGA), and

~~said microchip including a component which provides a power management component function of said personal computer; and~~

a wireless network connection mechanism configured to connect [said] the personal computer to [said] the network, [said] the network ~~including~~ comprising:
an Internet.

211. (Currently Amended) The personal computer of claim 210, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

212. (Currently Amended) The personal computer of claim 210, wherein [said] the wireless network connection mechanism, a flash memory component and a firewall hardware component are [is] substantially located on [said] the microchip.

213. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip including a comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a non-volatile memory component, and~~

~~said microchip including a component which provides a power management component function of said personal computer; and~~

a wireless network connection mechanism configured to connect [said] the personal computer to [said] the network, [said] the network including comprising:

an Internet,

[said] the wireless network connection mechanism including comprising a capability to make a wireless connection to [said] a second personal computer through at least one wireless link, and

[said] the wireless connection being made without a network server or router.

214. (Currently Amended) The personal computer of claim 213, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

215. (Currently Amended) The personal computer of claim 213, wherein [said] the wireless network connection mechanism makes [said] the wireless connection directly to [said] the second personal computer through only one wireless link.

216. (Currently Amended) The personal computer of claim 213, wherein [said] the wireless network connection mechanism ~~includes~~ comprises a capability to make a wireless connection to a third personal computer through only one wireless link, such that [said] the third personal computer has a wireless connection to [said] the second personal computer through [said] the personal computer.

217. (Currently Amended) The personal computer of claim 213, wherein [said] the wireless network connection mechanism, a flash memory component and a firewall hardware component are substantially located on [said] the microchip.

218. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip ~~including a plurality of~~ comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including~~ a non-volatile memory component, and

~~said microchip including a component which provides a power management component function of said personal computer; and~~
a wireless network connection mechanism configured to connect [said] the personal computer to [said] the network, [said] the network ~~including~~ comprising:
an Internet.

219. (Currently Amended) The personal computer of claim 218, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

220. (Currently Amended) The personal computer of claim 218, wherein [said] the wireless network connection mechanism, and a firewall hardware component are substantially located on [said] the microchip.

221. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip ~~including a~~ comprising:
at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024
microprocessors, exclusive of a digital signal processor (DSP),
~~said microchip including a non-volatile memory component,~~
~~said microchip including a~~ digital signal processor (DSP); and
~~said microchip including a component which provides a power management component function of said personal computer; and~~
a wireless network connection mechanism configured to connect [said] the personal computer to [said] the network, [said] the network ~~including~~ comprising:

an Internet; and
a World Wide Web.

222. (Currently Amended) The personal computer of claim 221, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

223. (Currently Amended) The personal computer of claim 221, wherein [said] the wireless network connection mechanism, a non volatile memory component and a firewall hardware component are substantially located on [said] the microchip.

224. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip including a comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a non-volatile memory component,~~

~~said microchip including a~~ digital signal processor (DSP); and

~~said microchip including a component which provides a power management component function of said personal computer; and~~

a wireless network connection mechanism configured to connect [said] the personal computer to [said] the network, [said] the network ~~including~~ comprising:

an Internet.

225. (Currently Amended) The personal computer of claim 224, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

226. (Currently Amended) The personal computer of claim 224, wherein [said] the wireless network connection mechanism, a non volatile memory component and a firewall hardware component are substantially located on [said] the microchip.

227. (Currently Amended) A personal computer, ~~configured to include operating as a mobile wireless personal communications device in a network including computers, the personal computer~~ comprising:

a microchip, [said] the microchip including a comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

~~said microchip including a non-volatile memory component,~~

~~said microchip including~~ an application-specific integrated circuit (ASIC), and

~~said microchip including a component which provides a power management~~

component function of said personal computer; and

a wireless network connection mechanism configured to connect [said] the personal computer to [said] the network, [said] the network including comprising:

an Internet.

228. (Currently Amended) The personal computer of claim 227, wherein ~~said personal computer includes a telephone~~ the microchip comprises an encryption component.

229. (Currently Amended) The personal computer of claim 227, wherein [said] the wireless network connection mechanism, a non-volatile memory component and a firewall hardware component are substantially located on [said] the microchip.

230. (Currently Amended) The personal computer of claim 130, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

231. (Currently Amended) The personal computer of claim 130, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

232. (Currently Amended) The personal computer of claim 198, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

233. (Currently Amended) The personal computer of claim 198, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

234. (Currently Amended) The personal computer of claim 201, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

235. (Currently Amended) The personal computer of claim 201, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

236. (Currently Amended) The personal computer of claim 204, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

237. (Currently Amended) The personal computer of claim 204, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

238. (Currently Amended) The personal computer of claim 207, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

239. (Currently Amended) The personal computer of claim 207, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

240. (Currently Amended) The personal computer of claim 210, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

241. (Currently Amended) The personal computer of claim 210, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

242. (Currently Amended) The personal computer of claim 213, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

243. (Currently Amended) The personal computer of claim 213, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

244. (Currently Amended) The personal computer of claim 218, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

245. (Currently Amended) The personal computer of claim 218, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

246. (Currently Amended) The personal computer of claim 224, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

247. (Currently Amended) The personal computer of claim 224, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

248. (Currently Amended) The personal computer of claim 227, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that ~~includes~~ comprises multiplexing.

249. (Currently Amended) The personal computer of claim 227, wherein [said] the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).